

**GENERIC NAME:**

**MORPHINE SULFATE**

112.19

**BRAND NAME:** Morphine Sulfate

**CLASS:** narcotic agonist

Mechanism of Action:

Alleviates pain by acting on the pain receptors in the brain; elevates pain threshold.

Depresses central nervous system; depresses brainstem respiratory centers; decreases responsiveness to changes in PaCO<sub>2</sub>.

Increases venous capacitance (venous pooling), vasodilates arterioles, reducing preload and afterload.

Histamine release.

Indications and Field Use:

Analgesia, especially in patients with burns, myocardial infarction, or renal colic.

Pulmonary edema (cardiogenic).

Contraindications:

Respiratory depression

Head injuries

Elevated Intra cranial pressure

Asthma, relative

Abdominal pain, relative

Adverse Reactions:

**CV:** Brady or tachydysrhythmias, orthostatic hypotension

**Resp:** Respiratory depression or arrest

**CNS:** Excess sedation, seizures to coma and arrest, pupillary constriction

**GI:** Nausea and vomiting, GI spasm

**Derm:** Histamine release may cause local urticaria

**NOTES ON ADMINISTRATION**

Incompatibilities/Drug Interactions:

CNS side effects (including respiratory depression) can be reversed by naloxone.

Adult Dosage:

**IV Dose:** Administer 1-3 mg increments slow IV PUSH (over 1-5 minutes) until desired effect.

## GD-048-PHS-EMS: Drug Profile for Morphine Sulfate

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### Pediatric Dosage:

100-200 µg/kg slow IV push

### Routes of Administration:

Usually given IV in the field, can be given IM or SC.

\*\* IV infusion may be transported on interfacility transfers, infusion pump required.

### Onset of Action:

Seconds

### Peak Effects:

20 minutes

### Duration of Action:

2-4 hours

### Dosage Forms/Packaging:

10 mg/ml ampules, **only**

### Arizona Drug Box Supply Range:

PARAMEDIC: 2 (20 mg)

INTERMEDIATE: 2 (20 mg)

### Special Notes:

- > Schedule II narcotic.
- > Watch for histamine effects (wheals, urticaria) proximal to IV site; contact medical control
- > Correct hypotension before administration.
- > Maximum respiratory depression 7-10 minutes after administration; can be reversed with naloxone; use caution in patients with emphysema.
- > Infusions: IV infusions of morphine sulfate may be transported, however an infusion pump is required.

\*\* Indicates special training requirement